Testing of Residents & Colleagues in Congregate Settings Including Skilled Nursing Facilities

Updated July 1, 2021

What's Changed: Updated to reflect CDC guidance regarding Antigen testing sensitivity, specificity and interpretation for Congregate Settings.

Purpose
Given their congregate nature and resident population served (e.g., older adults often with underlying chronic medical conditions), Nursing home residents are at high risk for infection, serious illness, and death from COVID-19. Experience with outbreaks in nursing homes has also reinforced that residents with COVID-19 may not report typical symptoms; some may not report any symptoms. Unrecognized asymptomatic and pre-symptomatic infections, in residents and in colleagues caring for residents, likely contribute to transmission in these settings.

Periodic screening testing of both residents and colleagues who do not have symptoms of possible COVID-19 is often done using an antigen test method. Testing for diagnostic purpose, e.g., resident with new symptoms of possible infection or resident who is a new admission to the facility, should be performed with nucleic acid or antigen for SARS-CoV-2. assays. For those with symptoms, antigen test can be used as these are typically readily available at the point of care.

Identification of asymptomatic virus-positive residents will allow them to be cohorted in defined areas, thus reducing exposure of other residents. Early identification of asymptomatic, virus-positive colleagues will also allow their exclusion from work (for a period of 10 days and 24 hours fever-free without fever-reducing medication) and thus reduce the likelihood of spread of disease to residents and co-workers.

Testing residents with signs or symptoms of COVID-19:
- At least daily, take the temperature of all residents and ask them if they have any COVID-19 symptoms. Perform viral testing of any resident who has signs or symptoms of COVID-19.
  - Clinicians should use their judgment to determine if a resident has signs or symptoms consistent with COVID-19 and whether the resident should be tested. Individuals with COVID-19 may not show common symptoms such as fever or respiratory symptoms. Some may present with only mild symptoms or other less common symptoms.
  - Clinicians are encouraged to consider testing for other causes of respiratory illness, such as influenza, in addition to testing for SARS-CoV-2.
- Testing asymptomatic residents with known or suspected exposure to an individual infected with SARS-CoV-2, including close and expanded contacts (e.g., there is an outbreak in the facility):
  - Perform expanded viral testing of all residents in the nursing home if there is an outbreak in the facility (i.e., a new SARS-CoV-2 infection in any resident or colleague).
○ A single new case of SARS-CoV-2 infection in any resident or colleague should be considered an outbreak. When one case is detected in a nursing home, there are often other residents and colleagues who are infected with SARS-CoV-2 who can continue to spread the infection, even if they are asymptomatic. Performing viral testing of all residents as soon as there is a new confirmed case in the facility will identify infected residents quickly, in order to assist in their clinical management and allow rapid implementation of IPC interventions (e.g., isolation, cohorting, use of personal protective equipment) to prevent SARS-CoV-2 transmission.

○ When undertaking facility-wide viral testing, facility leadership should expect to identify multiple asymptomatic and pre-symptomatic residents with SARS-CoV-2 infection and be prepared to cohort residents.

○ If viral testing capacity is limited and has not been required by local or state mandates, CDC suggests first directing testing to residents who are close contacts (e.g., on the same unit or floor of a new confirmed case or cared for by infected colleague).

Testing of Colleagues:

● Ministries will also need to follow requirements for testing residents and/or colleagues issued by local, state or federal agencies. By and large, health care personnel do not wish to be a source of exposure and transmission to residents or others given high risk for severe disease.

● If supplies and lab capacity for testing are limited but direct care colleague testing is desired to exclude asymptomatic viral carriers, then a more focused testing strategy may be considered. Risk factors may include working in more than one SNF – especially one in which an outbreak of SARS-CoV-2 is suspected, colleague with other household members who also work in SNFs or other types of healthcare facilities or is a first responder. An appropriate screening tool for use at pre-shift screening is included, below.* Staff should be reassured that, if they test positive, they will be furloughed for a full two weeks with normal pay and benefits as per MercyOne policy.

Lifting of Restrictions (Reopening) of Nursing Homes: Initial (baseline) testing of asymptomatic residents without known or suspected exposure to an individual infected with SARS-CoV-2 is part of the recommended reopening process.

● Perform initial viral testing of each resident in a nursing home as part of the recommended MercyOne Reopening Process

○ In any nursing home, initial viral testing of each resident (who is not known to have previously been diagnosed with COVID-19) is recommended because of the high likelihood of exposure during a pandemic, transmissibility of SARS-CoV-2, and the risk of complications among residents following infection.

○ The results of viral testing will determine the care decisions, infection control interventions, and placement decisions (e.g., cohorting decisions) relevant to that resident.
Test-Based Strategy or Symptom-based Strategy to Determine Resolution of Infection:

Except for rare situations, a test-based strategy is no longer recommended to determine when to discontinue Transmission-Based Precautions. A test-based strategy is no longer recommended (except as noted below) because, in the majority of cases, it results in prolonged isolation of patients who continue to shed detectable SARS-CoV-2 RNA but are no longer infectious.

Symptom-Based Strategy for Discontinuing Transmission-Based Precautions:

Patients with mild to moderate illness who are not severely immunocompromised:
- At least 10 days have passed since symptoms first appeared and
- At least 24 hours have passed since last fever without the use of fever-reducing medications and
- Symptoms (e.g., cough, shortness of breath) have improved

Note: For patients who are not severely immunocompromised and who were asymptomatic throughout their infection, Transmission-Based Precautions may be discontinued when at least 10 days have passed since the date of their first positive viral diagnostic test.

Patients with severe to critical illness or who are severely immunocompromised:
- At least 20 days have passed since symptoms first appeared and
- At least 24 hours have passed since last fever without the use of fever-reducing medications and
- Symptoms (e.g., cough, shortness of breath) have improved

Note: For severely immunocompromised patients who were asymptomatic throughout their infection, Transmission-Based Precautions may be discontinued when at least 20 days have passed since the date of their first positive viral diagnostic test.

Test-Based Strategy for Discontinuing Transmission-Based Precautions:
- A test-based strategy, which requires serial tests and improvement of symptoms, could be considered for discontinuing Transmission-Based Precautions earlier than the symptom-based strategy. However, in most cases, the test-based strategy results in prolonged isolation of residents who continue to shed detectable SARS-CoV-2 RNA but are no longer infectious. A test-based strategy could also be considered for some residents (e.g., those who are severely immunocompromised) in consultation with local infectious diseases experts if concerns exist for the resident being infectious for more than 20 days. In all other circumstances, the symptom-based strategy should be used to determine when to discontinue Transmission-Based Precautions.

The criteria for the test-based strategy are:

Patients who are symptomatic:
- Resolution of fever without the use of fever-reducing medications and
- Symptoms have improved, and
• Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA.

Patients who are not symptomatic:
• Results are negative from at least two consecutive respiratory specimens collected ≥24 hours apart (total of two negative specimens) tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA.

Repeat Testing in Coordination with the Health Department
Non-diagnostic testing of asymptomatic residents without known or suspected exposure to an individual infected with SARS-CoV-2 (apart from the initial testing referenced above):

• After initially performing viral testing of all residents in response to an outbreak, CDC & CMS recommends repeat testing to ensure there are no new infections among residents and colleagues and that transmission has been terminated as described below. Repeat testing should be coordinated with the local, territorial, or state health department.
• Continue repeat viral testing of all previously negative residents, generally every 3 days to 7 days, until the testing identifies no new cases of SARS-CoV-2 infection among residents or colleagues for a period of at least 14 days since the most recent positive result. This follow-up viral testing can assist in the clinical management of infected residents and in the implementation of infection control interventions to prevent SARS-CoV-2 transmission.
  ○ If viral test capacity is limited, CDC suggests directing repeat rounds of testing to residents who leave and return to the facility (e.g., for outpatient dialysis) or have known exposure to a case (e.g., roommates of cases or those cared for by a HCP with confirmed SARS-CoV-2 infection). For large facilities with limited viral test capacity, testing only residents on affected units could be considered, especially if facility-wide repeat viral testing demonstrates no transmission beyond a limited number of units.

Public health should be notified about residents or HCP with suspected or confirmed COVID-19, residents with severe respiratory infection resulting in hospitalization or death, or ≥ 3 residents or HCP with new-onset respiratory symptoms within 72 hours of each other.

Considerations for Testing of Colleagues and Residents:
• All testing assays have known false negative and false positive rates.
• Negative test results must not be allowed to cause laxity in use of appropriate PPE. If serologic test is used, detection of antibody is not to be used to lessen use of PPE nor used as a basis for work assignment.
• Molecular RT-PCR assays provide prevalence data that represents only a single point in time, and exposures may occur through continuing outside of a colleague's work, e.g., in the community. Data do not yet exist to guide the appropriate frequency of testing.
• Exclusion of virus-positive colleagues may reduce the availability of staff, and contingency plans should be in place to maintain facility capabilities for the safe care of residents.
MercyOne Senior Community SNFs are encouraged to monitor all available public health and scientific recommendations with regard to testing strategies.

**Additional Recommendations on Use of Antigen Testing in Congregate Settings:**
Antigen tests are relatively inexpensive, and most can be used at the point of care. Most of the currently authorized tests return results in approximately 15–30 minutes. Antigen tests for SARS-CoV-2 are generally less sensitive than real-time reverse transcription polymerase chain reaction (RT-PCR) and other nucleic acid amplification tests (NAATs) for detecting the presence of viral nucleic acid.

Antigen tests have been used for screening testing in high-risk congregate housing settings, such as nursing homes, in which repeat testing has quickly identified people with COVID-19, informing infection prevention and control measures, thus preventing transmission. In this case, and where rapid test turnaround time is critical, there is value in providing immediate results with antigen tests, even though they may have lower sensitivity than NAATs.

**Interpretation for Symptomatic Persons (See also Figure 1. Antigen Test Algorithm for Congregate Living Settings below)**
- Resident or colleague: symptoms compatible with COVID-19 and antigen positive - likely infected and place in transmission-based precautions (resident), colleague (work restrictions).
  - if the person with a positive antigen test result is fully vaccinated, notify public health authorities. When possible, a separate specimen should be collected and sent to a laboratory for viral sequencing for public health purposes.
  - A positive antigen test result for a symptomatic person may need confirmatory testing if the person has a low likelihood of SARS-CoV-2 infection. For example, a low likelihood of SARS-CoV-2 infection would be a person who has not had a known or suspected exposure to a person with COVID-19 within the last 14 days or is fully vaccinated or has had a SARS-CoV-2 infection in the last three months. If the congregate living facility has had more than one unexpected positive test result that day, then that positive antigen test result may need confirmatory testing.
- Negative antigen test result for a symptomatic person = confirmed with a laboratory based NAAT. A negative antigen result for a symptomatic person may not need confirmatory testing if the person has a low likelihood of SARS-CoV-2 infection (see above). A symptomatic person who has received a negative antigen test result and then a positive confirmatory NAAT should follow CDC’s guidance for isolation.
  - A symptomatic person who has received a negative antigen test result and then a negative confirmatory NAAT but has had close contact with a person with COVID-19 within the last 14 days should follow CDC’s guidance for quarantine, which may include retesting 5-7 days after last known exposure.
  - A symptomatic person who has received a negative antigen test result and then a negative confirmatory NAAT but has a suspected exposure (such as an outbreak in the facility) should follow site-specific public health measures, such as quarantine and transmission-based precautions and should be serially tested every 3-7 days until there are no new cases for 14 days.

**Interpretation of Antigen Testing of Asymptomatic persons in a congregate living setting:**
- Asymptomatic person for COVID-19 with a positive antigen test result - confirm with a laboratory-based confirmatory NAAT. If an asymptomatic person receives a
A positive antigen test result and then a positive confirmatory NAAT result, they should follow CDC’s guidance for isolation. Confirmatory test will assist with precautions for someone with high likelihood of infection, e.g., person who has had close contact with or suspected exposure to a person with COVID-19 within the last 14 days and is not fully vaccinated and has not had a SARS-CoV-2 infection in the last 3 months.

○ Asymptomatic with negative test - generally means SARS-CoV-2 infection is not present. However, a negative antigen test result may need confirmatory testing if that asymptomatic person has a high likelihood of SARS-CoV-2 infection (see above).

○ Asymptomatic person with a negative antigen test result, or a positive antigen test result and then a negative confirmatory NAAT, should follow CDC’s guidance for quarantine if they have had close contact with or suspected exposure to a person with COVID-19 within the last 14 days. If that same person has not had any known exposure to COVID-19 within the last 14 days, then they do not need to quarantine.

References


Interim Guidance for Antigen Testing for SARS-CoV-2 | CDC

Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes | CDC
*Facility Screening Tool

Interview the following:
Nurses
CNAs/Service Associates/CNATs/Feeding Assistants
(NOTE: Include Agency Staff)
Activity Staff
Social Work Staff
Physician / advanced practice professional (e.g. NP, PA)

Introduction:
The health and safety of all residents and colleagues is our single most important priority. As we have seen an increase in the number of COVID-19 + residents and colleagues among our nursing homes, we continue to look for additional opportunities to prevent the spread of this highly contagious virus. We have the support of leadership, local and state health departments and we need your help.

Please answer the following questions. The questions will have no effect on your job no matter how you answer them.

1. Do you work in one or more health care settings in addition to this facility?__________
   If Yes, check all that apply:
   _____ A Hospital
   _____ A Nursing Home
   _____ Homecare/Hospice Agency
   _____ Assisted Living/Group Home
   _____ In-Home Private Duty Caregiver/Companion
   _____ Other Please Specify ____________________

2. Do you live with an individual who is a Health Care Worker / First Responder?_______

3. Have you had any exposure to an individual with active COVID19? __________

4. If we were able to offer testing would you be willing to be tested? __________

5. If you are willing to be tested, would you be able to go to an offsite testing location?__________

Thank you for your input.

Name of Colleague/Agency Staff:
_________________________________________________________________